

Date: Thu, 10 Mar 94 04:30:18 PST  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V94 #60  
To: Ham-Ant

Ham-Ant Digest                      Thu, 10 Mar 94                      Volume 94 : Issue    60

Today's Topics:

                    Commercial Antennas  
                    Dipole or Vertical for DX?  
                    GAP Challenger VIII (2 msgs)  
                    Help: Antenna for FAX on boat  
                    LUMINA APV, mobile antenna - HELP  
                    MFJ-245 SWR  
                    MFJ 1798 80-2 Meter Vertical (2 msgs)  
                    Question about mobile antenna 40/80m  
                    RG-58 and Discone ant. problem at VHF  
                    test (5 msgs)  
                    testing 1,2,3  
                    Thick Ethernet as Transmission Line? (2 msgs)

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: 9 Mar 94 19:38:10 GMT  
From: agate!howland.reston.ans.net!cs.utexas.edu!swrinde!sgiblab!rtech!ingres!  
kerry@ucbvax.berkeley.edu  
Subject: Commercial Antennas  
To: ham-ant@ucsd.edu

Anyone have a source for commercial antennas?

Specifically looking for a colinear vertical cut near the 144 MHz band  
with good gain for a repeater. Durability is most important and then  
the ability to tune the lobes (have the antenna cut accordingly).

Thanks in advance.

Post here, or email to:

kerry@ingres.com  
Kerry Kurasaki

-----  
Date: 8 Mar 94 18:44:40 GMT  
From: agate!howland.reston.ans.net!news.intercon.com!udel!news.sprintlink.net!  
direct!news.direct.net!kg7bk@ucbvax.berkeley.edu  
Subject: Dipole or Vertical for DX?  
To: ham-ant@ucsd.edu

asirene@ntuvax.ntu.ac.sg wrote:  
: Just wanted to know if a dipole or vertical performs better for QRP DX?  
: This is on 20 meters. 73 de 9V Daniel

Hi Daniel, My rotatable dipole at 60 ft. always outperforms my 17m vertical.  
The 17m vertical is a modified CB antenna with the base at 20 ft with 4  
radials and is fed with coax. The rotatable dipole is fed with ladder-  
line and I use it on all bands 20-10m. No report has been in favor of the  
vertical over the dipole.

73, Cecil, kg7bk@indirect.com

-----  
Date: Wed, 9 Mar 1994 19:46:30 GMT  
From: ihnp4.ucsd.edu!sdd.hp.com!vixen.cso.uiuc.edu!howland.reston.ans.net!  
news.intercon.com!news.pipeline.com!malgudi.oar.net!utnetw.utoledo.edu!  
uoft02.utoledo.edu!jdrees@network.ucsd.edu  
Subject: GAP Challenger VIII  
To: ham-ant@ucsd.edu

Anybody got experience with the GAP Challenger VIII. As I only have room for  
one antenna, the many bands on it looks good. I am concerned about mounting  
it on a roof. The antenna lists at 31.5 feet, and my roof is 26 feet up.  
Anybody tried it, or done something similiar??

-----  
Date: 10 Mar 94 03:46:26 GMT  
From: agate!howland.reston.ans.net!sol.ctr.columbia.edu!news.mtu.edu!news.mtu.edu!  
not-for-mail@ucbvax.berkeley.edu  
Subject: GAP Challenger VIII

To: ham-ant@ucsd.edu

jdrees@uoft02.utoledo.edu wrote:

: Anybody got experience with the GAP Challenger VIII. As I only have room for  
: one antenna, the many bands on it looks good. I am concerned about mounting  
: it on a roof. The antenna lists at 31.5 feet, and my roof is 26 feet up.  
: Anybody tried it, or done something similiar??  
: I have a GAP DX Challenger VI, and I havent had good luck with it AT ALL!  
If you have enough room for a dipole, or sloper, you'll probably be better  
off. Much cheaper too!

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Date: 8 Mar 94 22:57:13 GMT

From: agate!howland.reston.ans.net!cs.utexas.edu!swrinde!menudo.uh.edu!hounix!mwk!  
watersje@ucbvax.berkeley.edu

Subject: Help: Antenna for FAX on boat

To: ham-ant@ucsd.edu

I would like to install an antenna up on my 30 ft boat for receiving weather fax  
transmissions (5-15 MHz, I think is the general range).

I think my only options are whip or random wire. I can mount a reasonably  
sized whip pretty easily. A random wire can be strung (nearly vertical)  
parallel to the backstay; some people use their backstay, but load bearing  
isolators are expensive. I don't think I can rig a dipole without enterfering  
with the sail plan.

Please advise what configuration would work best.

I've seen some outfit selling a combination of 8ft whip (CB antenna I guess)  
with an MFJ random wire tunner.

I'll be trying to connect this to my Sangean 803A, which has an RCA input for  
external antenna - I've heard that crocodile clipping to the telescopic antenna  
is sometimes better than using the external antenna jack - why is that?

Please advise whether any type of impedance matcher/amplifyier will do me any  
good.

Thanks,  
Jeremy.

--

Jeremy Waters  
watersje@mwk.com

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Date: Wed, 9 Mar 1994 19:26:39 GMT  
From: agate!howland.reston.ans.net!cs.utexas.edu!utnut!torn!uunet.ca!uunet.ca!  
dmog10.bell.ca!bcocek!vega!ydupont@ames.arpa  
Subject: LUMINA APV, mobile antenna - HELP  
To: ham-ant@ucsd.edu

Does anyone have a suggestion for mobile antenna to put on a Chevrolet  
LUMINA APV? This vehicule is PLASTIC...

What are your experience or suggestion with that kind of problem!

Thanks,

Yvan - VE2YDU

Bell SYGMA, Telecom Solutions  
30 Renaud, Loretteville (Qc) CANADA G2A 2K7  
TEL: 418-843-7564 FAX: 418-842-9559  
Internet: ydupont@Qc.bell.CA HAM: VE2YDU@VE2GPQ.#QBC.PQ.CAN.NA

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Disclaimer: The opinions expressed here are mine and not my employer's.

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Date: Wed, 9 Mar 1994 15:49:29 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!gatech!swrinde!sgiblab!  
cs.uoregon.edu!reuter.cse.ogi.edu!hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu  
Subject: MFJ-245 SWR  
To: ham-ant@ucsd.edu

Fred McKenzie (fred-mckenzie@ksc.nasa.gov) wrote:  
: In article <2lh939\$sun@newswire.etdesg.TRW.COM>, wayne@howard.nafb.trw.com  
: (Wayne Price) wrote:  
: > Lowest SWR occurs at resonance.

: Wayne-

: I'm curious. Are you sure this is true?

: If you had a resonant 72 Ohm dipole with 50 Ohm cable, it could be  
: represented as a 1.44:1 circle on a Smith Chart. Does the complex  
: impedance of the dipole go outside the circle as you move away from  
: resonance, or does it make a pass inside first?

Resonance can be defined as a point at which the reactive component  
of the impedance is zero. If you change that reactive component, you

move exactly tangent to the circle you mention, and at that point, the  $d(\text{SWR})/dX$  is zero--you get no SWR change for a delta reactance change. Yes, the reactance causes motion on a circle, but that circle and the SWR circle are tangent at that resonance point.

BUT (and don't anyone dare take that preceeding paragraph out of this context) the RESISTIVE component is ALSO changing as you change frequency (or antenna length, equivalently). As a result, there is a  $d(\text{SWR})/dR$  component that is NOT zero, and it will \_always\_ get you to an incrementally lower SWR in one direction or another. For the case you mentioned, it will be at a frequency slightly lower than resonance.

Finally, this is an incremental thing. Don't expect to be very far from resonance when the SWR is lowest in such a case.

Also, this assumes a resistive component that changes with frequency. This is the case for a 1/2 wave center-fed dipole, or a 1/4 wave fed over ground, but for an end-fed 1/2 wave, or a 3/4 wave, or any resonances above that first one, the  $dR/df$  is likely to be extremely close to zero.

73, K7ITM

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Date: 8 Mar 94 14:45:28 GMT  
From: agate!howland.reston.ans.net!math.ohio-state.edu!news.acns.nwu.edu!ftpbox!mothost!delphinium.cig.mot.com!rtsg.mot.com!reichrt@ucbvax.berkeley.edu  
Subject: MFJ 1798 80-2 Meter Vertical  
To: ham-ant@ucsd.edu

Has anyone out there obtained and tried out the new MFJ 1798 80 thru 2 Meter Vertical antenna yet? If so any comments on performance, VSWR, BW, Mechanical contruction, etc.

Replies to group or direct. Thanks

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=====
| Charles H. Reichert      708-632-6669 Work - MOTOROLA, INC Cellular |
| KD9JQ                   708-358-3827 HOME - after 8PM CST weekdays |
| reichrt@rtsg.mot.com    955 Concord Ln. Hoffman Ests., IL. 60195   |
=====
```

-----  
Date: Wed, 09 Mar 1994 10:13:14 -0500

From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa  
Subject: MFJ 1798 80-2 Meter Vertical  
To: ham-ant@ucsd.edu

In article <2li328\$6mk@delphinium.cig.mot.com>, reichrt@rtsg.mot.com  
(Charles H. Reichert) wrote:

> Has anyone out there obtained and tried out the new MFJ 1798 80 thru 2 Meter  
> Vertical antenna yet? If so any comments on performance, VSWR, BW, Mechanical  
contruction, etc.

Charles-

I don't find the MFJ 1798, in the Amateur Electronic Supply catalog, which  
has been out for about 4 months. They do have the 1796 listed, which is 40  
thru 2 Meters. Since the MFJ 1796 was listed in the catalogs for about a  
year before it made it to production, I wouldn't expect to see a production  
model 1798, for quite some time.

MFJ seems to have a problem in this area. They may be "testing the  
market", by announcing products that are not yet in production. If no one  
orders them, they may never make it to production.

Have you heard anything good about the MFJ 1796, 40 thru 2 Meter model? I  
get the impression that it works, but is somewhat fragile.

73, Fred, K4DII

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Date: Wed, 09 Mar 1994 10:44:08 -0500  
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa  
Subject: Question about mobile antenna 40/80m  
To: ham-ant@ucsd.edu

In article <CMD1o8.5su@news.direct.net>, kg7bk@indirect.com (Cecil Moore)  
wrote:

> Hi Manne, Maxwell, author of "Reflections" doesn't think much of  
> Hustlers. They are lossy, low-Q, and near self-resonance... all  
> to "lower the SWR for the wrong reasons." Maxwell says that, in  
> general, the mobile antenna with the highest SWR will radiate the  
> most power. Hamsticks from Lakeview are good hi-Q mobile antennas.  
> I've heard the Texas BugCatcher is pretty good although Maxwell says

Cecil-

I am having good results with Hustler low-power resonators, with the mast  
that folds low (fender mount), but using a magnet mount on the roof of my  
car. I have made contacts on 75 meter SSB, but not enough to judge by.

However, results on 40 meters have been very good. Some of the other antennas you mentioned may be better, but I doubt by much. Also, I doubt I could mount a "BugCatcher" on the magnet mount!

I disagree with your assessment of the Lakeview HamStick. I have one for 75 meters. I find it has LOWER Q than the 75 meter Hustler (low power resonator). By inspection, you can see that the coil is spread over a greater length of the HamStick, starting lower on the antenna than the resonator of the Hustler. Since most of the radiation from such a vertical antenna comes from the bottom (high current) section, more will be wasted in the coil wire of the HamStick, than in the mast of the Hustler below the resonator. Note: The 75 meter HamStick has wider bandwidth than the 75 meter Hustler. Wider bandwidth = Lower Q.

If this disagrees with your reference source, I think there is reason to doubt your source's credibility.

73, Fred, K4DII

-----  
Date: Wed, 9 Mar 1994 18:26:38 GMT  
From: envoy!jim@uunet.uu.net  
Subject: RG-58 and Discone ant. problem at VHF  
To: ham-ant@ucsd.edu

Very interesting. I have had very similar experience with a Radio Shack discone that was given to me. I assumed that it was just defective, hence the gift. It did seem to perform ok on transmit however (2 mtr FM) which seemed a bit odd. I would be interested in others experience and suggestions as well.

-----  
Jim Mueller | Work : (702) 689-3111 | net: jim@unssun.scs.unr.edu  
11865 Deodar Way | Home : (702) 677-2775 | WB7AUE  
Reno, NV 89506 | |

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11865 Deodar Way | Home : (702) 677-2775 | WB7AUE  
Reno, NV 89506 | |

-----  
Date: 8 Mar 94 17:13:27 GMT  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!oakhill!

victorc@ucbvax.berkeley.edu  
Subject: test  
To: ham-ant@ucsd.edu

testing

-----  
Date: 8 Mar 94 20:17:47 GMT  
From: dog.ee.lbl.gov!ihnp4.ucsd.edu!swrinde!cs.utexas.edu!oakhill!  
victorc@ucbvax.berkeley.edu  
Subject: test  
To: ham-ant@ucsd.edu

test

-----  
Date: 8 Mar 94 20:42:52 GMT  
From: dog.ee.lbl.gov!ihnp4.ucsd.edu!swrinde!cs.utexas.edu!oakhill!  
victorc@ucbvax.berkeley.edu  
Subject: test  
To: ham-ant@ucsd.edu

testing

-----  
Date: 8 Mar 94 23:25:06 GMT  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!cs.utexas.edu!oakhill!  
victorc@ucbvax.berkeley.edu  
Subject: test  
To: ham-ant@ucsd.edu

test

-----  
Date: Wed, 9 Mar 1994 21:02:43 GMT  
From: ihnp4.ucsd.edu!sdd.hp.com!sgiblab!gatekeeper.us.oracle.com!barrnet.net!  
netnews.synoptics.com!news@network.ucsd.edu  
Subject: test  
To: ham-ant@ucsd.edu

Just like school . I havent been studying for these damn tests :)

Dave



-----  
Date: 9 Mar 94 23:06:46 GMT  
From: dog.ee.lbl.gov!ihnp4.ucsd.edu!swrinde!cs.utexas.edu!oakhill!  
victorc@ucbvax.berkeley.edu  
Subject: testing 1,2,3  
To: ham-ant@ucsd.edu

Test

-----  
Date: 8 Mar 94 17:49:42 GMT  
From: agate!howland.reston.ans.net!vixen.cso.uiuc.edu!sdd.hp.com!caen!  
malgudi.oar.net!gomer.albus.com!usenet@ucbvax.berkeley.edu  
Subject: Thick Ethernet as Transmission Line?  
To: ham-ant@ucsd.edu

I have come across a quantity of Thick Ethernet cable (yellowjacket coax),  
Belden YS-21553 style 1478 #1700415-01. Does anyone know whether it is  
suitable for use on 2M and 440 MHz? Thanks,

David Mitchell  
Aldus Corporation                      Bainbridge Ometepe Sister Islands Association  
david.mitchell@aldus.com                      davidm@bosia.org

My opinions are my own.

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Date: 8 Mar 94 21:44:14 GMT  
From: agate!howland.reston.ans.net!cs.utexas.edu!csc.ti.com!tilde.csc.ti.com!  
skopen.dseg.ti.com!sc04!jmyers@ucbvax.berkeley.edu  
Subject: Thick Ethernet as Transmission Line?  
To: ham-ant@ucsd.edu

Yes, the thick ethernet coax works great up 400 mhz. However, examine the coax  
for  
tap holes from the ethernet transceivers--I found the holes can cause considerable  
problems with contamination, reflections, gremlins, etc.

Regards,  
Jim

-----  
Date: Wed, 9 Mar 1994 19:15:01 GMT

From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!swrinde!gatech!news-  
feed-1.peachnet.edu!umn.edu!uum1!kksys.com!edgar!moron!nmmc!cgc.NMMC.Com!  
chrisc@network.ucsd.edu  
To: ham-ant@ucsd.edu

References <CM72rv.3qK@brunel.ac.uk>, <chrisc.81.763134772@central.nmmc.mn.org>,  
<763200100snz@g8sjp.demon.co.uk>du  
Subject : Re: Slim-jim dimensions?

In article <763200100snz@g8sjp.demon.co.uk> ip@g8sjp.demon.co.uk (Iain Philipps)  
writes:

>From: ip@g8sjp.demon.co.uk (Iain Philipps)  
>Subject: Re: Slim-jim dimensions?  
>Date: Wed, 9 Mar 1994 08:01:40 +0000  
>In article <chrisc.81.763134772@central.nmmc.mn.org>  
> chrisc@central.nmmc.mn.org "Christopher Cox" writes:  
>  
>Just to set the record straight :-)  
>  
> Fred Judd, G2BCX  
> Practical Wireless, April 1978  
>  
>See. America is bad for your memory.  
>  
>--  
>Iain Philipps

G8SJP - now there's a call from the past! Thanks Iain for setting me  
straight.

Chris W0/G4JEC  
ex G8PTC

--

Chris

Chris Cox W0/G4JEC  
Network Analyst  
North Memorial Medical Center  
3300 Oakdale Avenue North  
Robbinsdale, MN 55422

chrisc@Central.NMMC.Mn.Org  
NIC Handle: CC345  
Tel: (612) 520-7321  
Fax: (612) 520-5237

----- For mail of a more social nature, please use -----  
Internet: chrisc@moron.vware.mn.org  
Amprnet: chrisc@biggus.g4jec.ampr.org

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End of Ham-Ant Digest V94 #60

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